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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/549,416	04/14/2000	Rashid Attar	PA000230	9439

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER	
HO, CHUONG T	

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/549,416	ATTAR ET AL.	
	Examiner	Art Unit	
	CHUONG T. HO	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-45,47-56,58-62 and 65-77* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *2-45,47-56 and 58-62* is/are allowed.

6)☐ Claim(s) *65-77* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 2-45, 47, 48-56, 58-62, 65—77.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 65-66, 71, 73-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gubbi (U.S.Patent No. 6,574,668 B1) in view of Goodings et al. (U.S.Patent No. 5,377,192).

In the claim 65, see figures 3, 8, Gubbi discloses a system in a wireless communication system device (node B, i.g. CLIENT) receiving portions ([1] [2] [3] [4]) of a multi-slot packet ([1] [2] [3] [4] [5] [6] [7]) at a first data rate (bandwidth), each portion ([1] [2] [3] [4] [5] [6] [7]) received during a separate time slot, the multi-slot packet ([1] [2] [3] [4] [5] [6] [7]) having a maximum number of time slots ([1] [2] [3] [4] [5] [6] [7]) for transmission, the maximum number of time slots ([1] [2] [3] [4] [5] [6] [7]) for transmission allocating slots for retransmission of the multi-slot packet [3] (see col. 7, lines 15-25).

However, Gubbi is silent to disclosing attempting to decode the accumulated portions of the multi-slot packet; if the decode is successful, sending a Stop-Repeat message.

Goodings et al. , see figure 14, discloses attempting to decode the accumulated portions of the multi-slot packet; if the decode is successful, sending a Stop-Repeat

message (see col. 12, lines 48-53, as each slot is received, the data is decoded and the complete packet is assembled. An index number is transmitted as part of the fixed overhead, so that the receiver can check that all components of the packet have been received. As each slot DTR1, DTR2 is received and decoded correctly, the mobile will transmit an ACK (stop-repeat message) for the slot in a reserved subslot); Accumulating the received portions of the multi-slot packet (see col. 12, lines 48-53); Receiving portion of a multi-slot packet at a first data rate (see col. 4, lines 13-14, in one embodiment of the system, it permits the transmission of data at a rate of 6144 bits per second).

Both Gubbi and Goodings discloses the retransmission based on the ACK (stop-repeat message) and NAK (continue-repeat message). Goodings recognizes decoding the accumulated portions of the multi-slot packet; and if the decode is successful, sending a stop-repeat message. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Gubbi with the teaching of Goodings to attempt to decode the accumulated portions of the multi-slot packet; if the decode is successful, sending a Stop-Repeat message in order to improve the reliability of receiving the acknowledgement.

3. In the claims 71, 73, see figures 8, Gubbi et al. discloses receiving portions of a multi-slot packet at a first data rate, each portion received during a separate time slot ([1] [2] [3] [4] [5] [6] [7]) , the multi-slot packet having a maximum number of time slots ([1] [2] [3] [4] [5] [6] [7]) for transmission, the maximum number [7] of time slots for

transmission allocating slots ([3]) for retransmission of the multi-slot packet (see figures 3, 8, col. 7, lines 15-26, col. 7, lines 35-45).

However, Gubbi is silent to disclosing attempting to decode the accumulated portions of the multi-slot packet; if the decode is successful, sending a Stop-Repeat message.

Goodings et al. , see figure 14, discloses attempting to decode the accumulated portions of the multi-slot packet; if the decode is successful, sending a Stop-Repeat message (see col. 12, lines 48-53, as each slot is received, the data is decoded and the complete packet is assembled. An index number is transmitted as part of the fixed overhead, so that the receiver can check that all components of the packet have been received. As each slot DTR1, DTR2 is received and decoded correctly, the mobile will transmit an ACK (stop-repeat message) for the slot in a reserved subslot); Accumulating the received portions of the multi-slot packet (see col. 12, lines 48-53); Receiving portion of a multi-slot packet at a first data rate (see col. 4, lines 13-14, in one embodiment of the system, it permits the transmission of data at a rate of 6144 bits per second).

Both Gubbi and Goodings discloses the retransmission based on the ACK (stop-repeat message) and NAK (continue-repeat message). Goodings recognizes decoding the accumulated portions of the multi-slot packet; and if the decode is successful, sending a stop-repeat message. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Gubbi with the teaching of Goodings to attempt to decode the accumulated portions of the multi-slot

packet; if the decode is successful, sending a Stop-Repeat message in order to improve the reliability of receiving the acknowledgement.

4. In the claims 66, 74, Goodings discloses if the decode is not successful, comparing the number of received portions to a maximum number of time slots for transmission; if the number of received portion is equal to a maximum number of time slots for transmission, send a continue-repeat message (see col. 12, lines 48-53, col.17, lines 7-18, lines 47-53).

5. Claims 76, 75, 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Gubbi – Goodings) in view of Kobayashi et al. (U.S.Patent No. 2003/0179719).

In the claims 76, 75, 67, the combined system discloses the limitations of claim 73 above.

However, the combined system (Gubbi – Goodings) is silent to disclosing the transmitter is further adapted to transmit a data rate control message requesting a data rate for transmission .

Kobayashi et al. Discloses the transmitter is further adapted to transmit a data rate control message requesting a data rate for transmission (see col. 2, [0031] [0032]). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Kou – Goodings) with the teaching of Kobayashi to adapt to transmit a data rate control message requesting a data rate for transmission in order to be capable of high speed communication of control data and information data of plural kinds.

6. Claims 68-69, 72, 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodings (U.S.Patent No. 5,377,192) in view of Gubbi et al. (U.S.Patent No. 6,574,668 B1).

In the claims 68, 72, 77, Goodings , see figure 14, (col. 12, lines 48-53) discloses allocating a maximum number of time slots for transmission of a multi-slot packet; transmitting portions of the multi-slot packet at a first data rate (see col. 4, lines 13-14, in one embodiment of the system, it permits the transmission of data at a rate of 6144 bits per second), each portion transmitted during a separate time slot (see col. 12, lines 48-53, figure 14).

However, Goodings is silent to disclosing receiving a stop-repeat message prior to expiration of the maximum number of time slots for transmission of the multi-slot packet; and terminating transmission of the multi-slot packet.

Gubbi discloses , see figures 3, 8, receiving a stop-repeat message (ACK, acknowledgement message for [1] [2] [4]) prior to expiration of the maximum number (7) of time slots for transmission of the multi-slot packet ([1] [2] [4]); and terminating transmission of the multi-slot packet ([1], [2], [4]) (see col. 7, lines 15-26, lines 35-45).

Thus, it would have been obvious to one ordinary skill in the art at the time of the invention to modify the system of Goodings with the teaching of Gubbi to receive a stop-repeat message (acknowledgement message) prior to expiration of the maximum number of time slots for transmission of the multi-slot packet in order to control error recovery for one-way data transported between a sending entity and a receiving entity.

7. In the claim 69, Gubbi discloses after expiration of the maximum number (7) of transmission of the multi-slot packet, receiving a continue-repeat message (NAK) (see figures 3, 8, col. 7, lines 15-26, 35-45).

8. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Goodings-Gubbi) in view of Kobayashi et al. (U.S.Patent No. 2003/0179719).

In the claim 70, the combined system discloses the limitations of claim 73 above.

However, the combined system (Goodings-Gubbi) is silent to disclosing the maximum number of time slots for transmission is based on the first data rate.

Kobayashi et al. discloses the maximum number of time slots for transmission is based on the first data rate (see col. 2, [0031] [0032]).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined system (Goodings-Gubbi) with the teaching of Kobayashi to adapt to transmit a data rate control message requesting a data rate for transmission in order to be capable of high speed communication of control data and information data of plural kinds.

Allowable Subject Matter

9. Claims 2-45, 47-56, 58-62 are allowed.

The following is an examiner's statement of reasons for allowance: the prior arts (6088335, 6636500, 6563884, 5546394) of record does not appear to teach or render obvious the claimed limitations in combination with the specific added limitations, as recited from independent claims 2, 3, 5, 14, 16, 17, 18, 19, 20, 21, 22, 34, 48, 52, 53, 54

55, 56, 58, 59, 60, 61: "receiving a first signal having a data rate based on data rate control signal from the source node, comprising decoding a preamble from the first signal indicating that the first signal contains a packet of data addressed to the destination network node".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong ho whose telephone number is (571)272-3133. The examiner can normally be reached on Monday-Friday from 8:00AM-4:00PM.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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